

WHAT IS CLAIMED IS:

1. A data reading method of reading variable length-coded data, the method comprising:

5 a first code word reading step of sequentially reading a series of code words partitioned by a plurality of resynchronization markers; and  
a resynchronization marker detecting step of detecting a next resynchronization marker before a reading position in the first code word reading step reaches the next resynchronization marker.

10 2. The data reading method according to claim 1, further comprising:

a second code word reading step of sequentially reading the series of code words based on the next resynchronization marker detected in  
15 the resynchronization marker detecting step.

3. The data reading method according to claim 1, wherein the data is configured to be read in both forward and reverse directions,

20 the method further comprises a third code word reading step of reading the series of code words in an opposite direction to a reading direction in the first code word reading step, and

in the third code word reading step, the series of code words are sequentially read based on the resynchronization marker detected in the  
25 resynchronization marker detecting step.

4. The data reading method according to claim 1, further comprising:

30 an error identifying step of identifying an error in a range of data read in the first code word reading step.

5. The data reading method according to claim 4, wherein in the error identifying step, the error identification is made when the code word read in the first code word reading step is undecodable.

35 6. The data reading method according to claim 4, further

comprising:

a bit number information reading step of reading information about a number of bits between resynchronization markers; and

5 a counting step of counting the number of bits of a code word read in the first code word reading step, wherein

in the error identifying step, the error identification is made based on the information read in the bit number information reading step and the number of bits counted in the counting step.

10 7. A data reading apparatus for reading variable length-coded data, comprising:

a first code word reading device for sequentially reading a series of code words partitioned by a plurality of resynchronization markers; and

15 a resynchronization marker detecting device for detecting a next resynchronization marker before a reading position by the first code word reading device reaches the next resynchronization marker.

8. The data reading apparatus according to claim 7, further comprising:

20 a second code word reading device that sequentially reads the series of code words based on the next resynchronization marker detected by the resynchronization marker detecting device.

25 9. A program for executing a data reading method of reading variable length-coded data, wherein the programs makes a computer function as:

a first code word reading step of sequentially reading a series of code words partitioned by a plurality of resynchronization markers; and

30 a resynchronization marker detecting step of detecting a next resynchronization marker before a reading position in the first code word reading step reaches the next resynchronization marker.

10. The program according to claim 9, wherein the program makes the computer further function as:

35 a second code word reading step of sequentially reading the series of code words based on the next resynchronization marker detected in

the resynchronization marker detecting step.